# DTCC FICC FORUM 2022



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**FICC2022** 

#### **TODAY'S AGENDA**

- Opening Remarks, DTCC Overview & FICC Overview

  Laura Klimpel General Manager of FICC and Head of SIFMU Business Development, DTCC
- Government Securities Division Overview

  Brian Disken Executive Director, Fixed Income Product Management, DTCC
- Proposed Treasury Central Clearing with Live Q&A
  Laura Klimpel & Brian Disken
- Panel Discussion with Q&A

  Laura Klimpel General Manager of FICC and Head of SIFMU Business Development, DTCC

  Brian Disken Executive Director, Fixed Income Product Management, DTCC

  John Vinci Executive Director, Relationship Management DTCC

  Andrea Pfenning Global COO for Clearance & Collateral Management, BNY Mellon

  John Morik Head of Product and Strategy for GSS (Government Securities Services US), BNY Mellon





## AN OVERVIEW OF DTCC AND FICC

Laura Klimpel - General Manager of FICC and Head of SIFMU Business Development, DTCC

This document is only for informational purposes only. Capitalized terms used in the descriptions of FICC's services and not otherwise defined herein have the meaning assigned to them in either the MBSD Rules or the GSD Rules ("Rules"), as appropriate. Reference should be made to the Rules for a complete statement of the rules and procedures, and the rights, obligations, and other requirements applicable to use of the service of FICC. In the case of any discrepancy between descriptions of FICC's services in this document and the Rules, the Rules shall govern. Current versions of the Rules are available at https://www.dtcc.com/legal/rules-and-procedures

#### **About DTCC**

# ADVANCING FINANCIAL MARKETS. TOGETHER.

OUR PROMISE: We deliver resiliency, value and expertise for our clients. We were built in partnership with the industry to provide stability and efficiency in the global capital markets. With a focus on exceptional service, we promise to advance solutions and next-level innovation. With over **45 years of experience**, DTCC is the **premier post-trade market infrastructure** for the global financial services industry.

From operating facilities and data centers around the world DTCC, through its subsidiaries, automates, centralizes, and standardizes the processing of financial transactions across the trade lifecycle and mitigates risk for thousands of institutions worldwide.

# DTCC

...partners with clients to create market efficiencies that reduce industry and organizational costs through huge economies of scale

...helps **Secure** the financial markets, driving out industry and client risks through its **world-class infrastructure** 

...provides key information on the movement of markets; we are a major provider of **market intelligence** 

...keeps the global markets moving

### We Simplify The Complexities



Institutional Trade Processing
Clearing
Settlement
Asset Servicing
Collateral Management
Global Trade Reporting
Data Services



Corporate & Municipal Bonds
Derivatives
Equities
Government & Mortgage-Backed
Securities
Insurance Transactions
Money Market Investments
Mutual Funds



Custodian Banks
Fund Companies
Institutional Investors
Insurance Carriers & Distributors
Investment Managers
Issuers
Trust Companies
Central Securities Depositories
Exchanges and Marketplaces
Service Bureaus
Transfer Agents

# WE BRING ECONOMIES OF SCALE

# \$2.37 QUADRILLION SECURITIES PROCESSED IN 2021

# FIXED INCOME CLEARING

Processes \$4.5 trillion
per day in U.S. Government
Securities and a monthly
average of 8.35 trillion
Mortgage-Backed Securities
transactions

# SETTLEMENT & ASSET SERVICES

Worlds largest depository holds
1.39 million active U.S issues
worth \$87 trillion

Settles 643 million

U.S. Transactions per year

# **EQUITIES CLEARING**

Clears 202 million Broker-to-Broker
Transactions Per Day
Worth \$2.02 trillion for

50+ Exchanges and Trading Venues

## DERIVATIVES REPORTING

Covers all asset classes and processes
16.5 billion messages annually for
8,500+ firms globally

60+ regulators across the globe have access to our data from across 35 countries

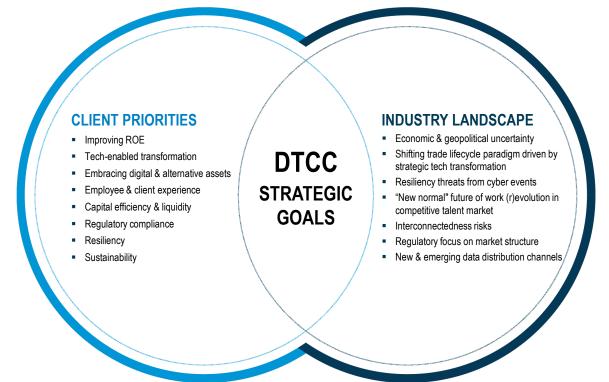
## INSTITUTIONAL TRADE PROCESSING

Processes an average of **3.3 million** institutional trades daily

Our unique capabilities and decades of experience deliver a network no other market infrastructure can match – 5,850 CLIENT FIRMS IN 93 COUNTRIES.

#### **What Drives Us**

DTCC is an extension of our clients' infrastructure, aligned in purpose and governed by the industry



#### **DTCC Services**





DTCC Clearing Services are offered through DTCC subsidiaries National Securities Clearing Corporation (NSCC) and Fixed Income Clearing Corporation (FICC). DTCC Settlement and Asset Services are offered through DTCC subsidiary The Depository Trust Company (DTC).



#### **DTCC:** Businesses and Solutions

Institutional Trade Processing INSTITUTIONAL DTCC's Institutional Trade Processing (ITP) service suite combines DTCC's global solution for legal entity identifiers, TRADE PROCESSING unparalleled settlement capabilities with market-leading pre-trade and matching services, offering buy-side, sell-side and custodian firms an end-to-end no-touch processing solution for their trading activity. **Equities Clearing** DTCC clears and settles virtually all broker-to-broker equity, listed corporate and municipal bond and unit investment trust (UIT) transactions in the U.S. equities markets **CLEARING SERVICES** Fixed Income Clearing Provides trade comparison, netting and settlement services for the government and mortgage-backed securities markets, providing efficiency, transparency and risk mitigation **Settlement Services** Settlement completes the transfer between trading parties of securities ownership and cash. DTC settles virtually all broker-to-broker equity and listed corporate and municipal debt securities transactions in the U.S. as well as institutional SETTLEMENT AND trades, money market instruments and other financial obligations **ASSET SERVICES Asset Services** The payment and transfer of securities ownership occurs at DTCC's DTC subsidiary, which provides custody and asset

services such as underwriting, securities and corporate actions processing, global tax services and issuer services

#### **DTCC: Businesses and Solutions**

#### Mutual Fund Services (MF)

MF delivers innovative transactional and information services that automate, standardize and centralize processes to create efficiencies and reduce cost and risk for the mutual fund marketplace

#### Alternative Investment Product (AIP) Services

AIP provides one standard, efficient end-to-end process for alternative investments such as hedge funds, funds of funds, private equity, non-traded real estate investment trusts (REITs), managed futures and limited partnerships

#### Insurance & Retirement Services (I&RS)

I&RS generates secure, automated and standardized low-cost infrastructure solutions that bring efficiencies to insurance carrier and distributor clients and the insurance marketplace as a whole

#### **Repository Services**

DTCC provides trade repository services for derivatives and securities financing transactions through its Global Trade Repository service (GTR), the industry leader in trade reporting. As the only industry-owned and -governed global provider of trade reporting services, GTR is uniquely positioned to help market participants address some of their most important operational and regulatory challenges in an ever-evolving environment.

#### **Derivatives Services**

DTCC's Derivatives Services mitigate the risks and increase the efficiency of derivatives post-trade processing by automating critical operations in the lifecycle of credit derivatives. Derivatives Services' offerings include the Trade Information Warehouse (TIW), the industry's leading asset servicing infrastructure for credit derivatives worldwide.

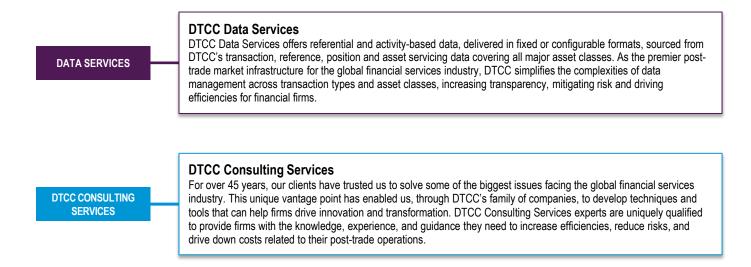
#### **DTCC Report Hub**

DTCC Report Hub's unparalleled functionality enables firms to: manage the complexities of trade reporting across 14 jurisdictions covering global derivatives regulation, Securities Financing Transactions Regulation (SFTR) and Markets in Financial Instruments Directive II (MiFID II) with a robust control framework; minimize the burden of updating your reporting processes to stay current with changing mandates; and unleash the potential of resilient, scalable, and intuitive technology to help firms master their pre and post reporting assurance tasks.

#### WEALTH MANAGEMENT SERVICES

REPOSITORY AND DERIVATIVES SERVICES

#### **DTCC:** Businesses and Solutions

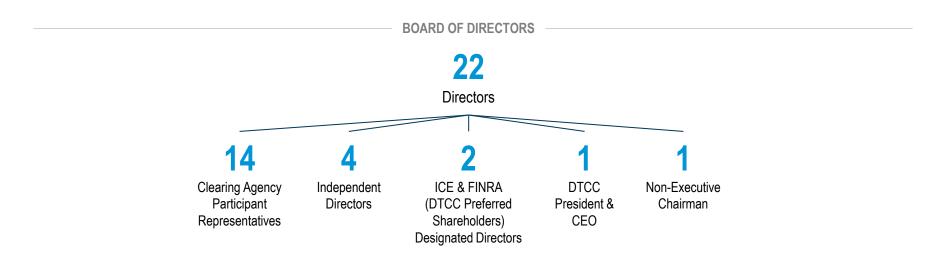


#### **Our Global Presence**



#### **DTCC Governance**

DTCC is owned by its common shareholders – each of whom is a participant user of one of DTCC's wholly-owned, regulated clearing agency subsidiaries.



Directors also serve on Board committees having responsibility to provide oversight in particular areas, as designated by the Board.

### **Who Supervises Us**

#### **OUR REGULATORS**



















































#### FIXED INCOME CLEARING CORPORATION

Mortgage-Backed Securities Division Overview

Laura Klimpel - General Manager of FICC and Head of SIFMU Business Development, DTCC

#### Introduction

- The Mortgage-Backed Securities Division of the Fixed Income Clearing Corporation provides real-time automated and trade matching, operational trade novation, trade confirmation, risk management, netting and electronic pool notification to the mortgage-backed securities market.
- Key participants in this market are mortgage originators, government-sponsored enterprises, registered broker/dealers, institutional investors, investment managers, mutual funds, commercial banks, insurance companies and other financial institutions.
- Services include:
  - Real-Time Trade Matching
  - Operational Trade Novation with FICC as Central Counterparty (CCP)
  - Electronic Pool Notification Services
  - TBA and Pool Netting Services
  - Do-Not-Allocate (DNA) Service
  - Mortgage-Backed Securities Clearing Services



#### **Benefits**

- Risk reduction
  - Trade novation and guarantee service mitigate counterparty and credit risk.
  - Trade matching addresses business and regulatory demand for more timely and transparent trade reporting.

- Operational cost reduction
  - 97% netting rate in TBA market, Pool Netting reduces settlement of pools by 40%.
  - Over 200,000 Odd-Lot transactions (value: \$4.7T) processed in the TBA Net between November 2017 and April 2018.
  - 65 70% reduction in pool allocations due to DNA.





## FIXED INCOME CLEARING CORPORATION

Government Securities Division Overview

Brian Disken - Executive Director, Fixed Income Product Management, DTCC

#### Introduction

- The Government Securities Division (GSD) is the leading provider of trade comparison, netting, novation, risk management and settlement for the government securities market.
- The GSD was founded as the Government Securities Clearing Corporation (GSCC) in 1986 by the primary dealer community.
- Account Types: Netting Member, Sponsored Member, Sponsoring Member, CCIT Member, Comparison Only Member, Executing Firms and Funds-Only Settlement Banks.

#### **GSD Statistics**

#### **Accounts**

- Netting Members 200+
- Sponsoring Members 33
- Sponsored Members 1,900+
- CCIT Members 7
- Comparison Only Members 6
- Executing Firms 1,300+

#### **2022 Transaction Averages**

- GSD Average Daily Volume 398k trades vs. \$4.54 trillion
- Comparison Percentage 99% (Buy/Sell) 99.93% (Repo)
- Netting Percentage 89.5% (# of trades) 72.3% (\$ value of trades)

#### November 2022 Daily Averages

- Sponsored Avg. Daily Volume \$375 billion
- Sponsored GC Avg. Daily Volume \$25 billion

## **GSD Trade Capture Platform**

#### Real-Time Trade Matching (RTTM®)

- Centralized automated facility to submit trades to FICC for intra-day matching and comparison.
- Members submit trades to RTTM interactively using standardized message types.
- Three submission modes: bilateral, locked-in (unilateral), demand (brokered repo).
- Provides immediate feedback on status changes and electronic trade confirmations.
- Evidences valid, binding and enforceable contract between trade counterparties.
- Types of trades flowing into RTTM include buy/sell, DVP repo, Auction Awards, Sponsored DVP,
   GCF Repo, Sponsored GC and CCIT Transactions.

## Delivery vs. Payment ("DVP") Service

- Eligible transactions: Buy/Sell trades and DVP Repo (overnight, term and forward).
- Eligible securities: U.S. Treasury Bills, Bonds, Notes, Treasury Zero Coupon Securities, U.S.
   Treasury Inflation Protection Securities (TIPS), Fixed Rate Non Mortgage-Backed Agency Securities,
   U.S. Treasury Floating Rate Notes.
- Netting: Repo and reverse repo transactions netted with member's other activity (buy/sell transactions, Auction Awards and Fails) in same CUSIP with the next business date settlement.
- Benefits: Reduced settlements and lower risk due to Trade Novation.
- Same Day Settlement on eligible transactions.

#### **Auction Takedown**

- Eligible securities: U.S. Treasuries.
- Auction awards submitted to FICC from the FRBNY on a locked-in basis.
- Awards are netted with secondary market trades in same security reducing securities movement.
- Settlement occurs with FICC on issue date for newly-issued/re-issued U.S. Treasury securities.

## **Netting**

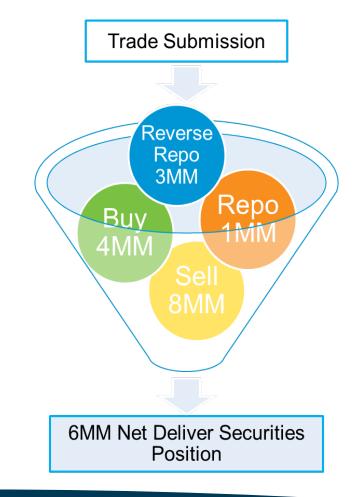
Establishes single net settlement obligation for member activity in each CUSIP.

DVP service - Includes buy/sell, repo activity, auction purchases and fails.

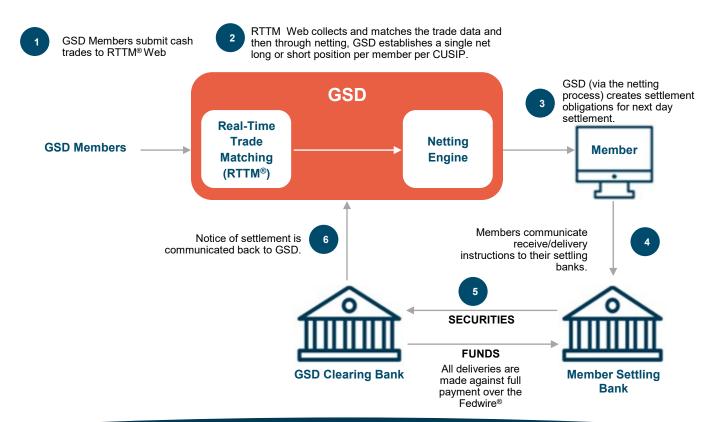
Tri-Party type services – Includes GCF Repo and CCIT activity.

Receive and deliver obligations established for net settlement positions.

Substantially reduces number of security movements required – associated risks are significantly reduced.



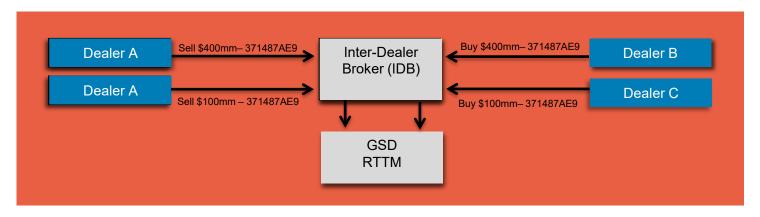
#### **Generic Transaction Flow**



## **GCF** Repo

- GCF Repo Service is a tri-party type service.
- Eligible securities includes U.S. Treasuries, U.S. TIPS, Agencies, Fixed and Adjustable Rate Fannie, Freddie and GNMA.
- Allow dealers to freely trade general collateral repos based on rate and term.
- No intra-day trade-for-trade settlement required.
- Generic CUSIPs netted into single net settlement amount.
- Net borrowers of funds allocate collateral to receive funds.
- Transactions settle via the GCF Clearing Agent Bank's Tri-party platform.

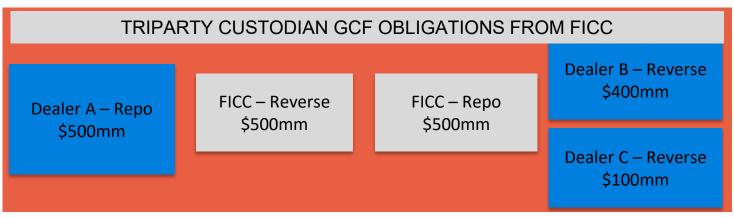
## **GCF** Repo Trade Flow



- Dealer A sells (Repo) \$400mm overnight in Treasuries to IDB.
- Dealer B buys (Reverse) \$400mm overnight in Treasuries from IDB.
- Dealer A sells (Repo) \$100mm overnight in Treasuries to IDB.
- Dealer C buys (Reverse) \$100mm overnight in Treasuries from IDB.
- IDB submits all trades to GSD.
- Dealers can affirm the trade electronically or via GSD RTTM Web application.
- GSD personnel monitor the affirmation process for exceptions throughout the day.
- 3:00PM Cutoff for all GCF Repo trade submissions and dealer affirmations.



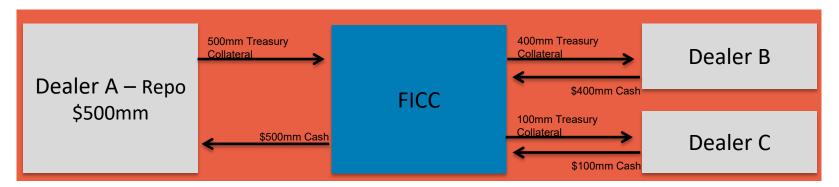
## **GCF Repo Netting Process**



- Example from previous slide:
  - Dealer A: net seller (cash borrower) of \$500mm AE9.
  - Dealer B: net buyer (cash lender) of \$400mm AE9.
  - Dealer C: net buyer (cash lender) of \$100mm AE9.
- 3:10 PM: Netting process is run to calculate the net position for each dealer at the GCF Repo Generic CUSIP level.
- 3:20 PM: GSD provides netting output to the GCF Clearing Agent Bank and members.
  - Output is utilized by the GCF Clearing Agent Bank to create tri-party "shells" representing the GCF Obligation amount.
  - FICC is counterparty to all transactions / IDB nets down to 0.



## **GCF Repo Settlement Overview**



- · Netted GCF Obligations are created each day from the GCF net.
- All principal cash and securities settlement takes place at the GCF Clearing Agent Bank.
- GCF Clearing Agent Bank prices are utilized for valuation.
- Obligations are collateralized at 100% no haircut.
- GCF Repo members have until 4:30 PM to collateralize their GCF Repo obligations and/or have cash to satisfy their GCF Repo obligations

#### Following Day

- Collateral stays locked up in reverse dealer's account until 3:30pm Eastern Time the following day.
- Intraday individual CUSIP substitutions take place to allow for bilateral DVP settlement.

#### **CCIT Service**

- As an expansion of the GCF Repo service, the Centrally-Cleared Institutional Triparty<sup>™</sup> ("CCIT<sup>™</sup>")
   Service extends FICC's CCP services and guarantee of completion of eligible trades to tri-party repo
   transactions between GSD dealer members and eligible tri-party money lenders.
- CCIT Members can only be cash lenders.
- CCIT Transactions are bi-laterally matched via the GCF Repo platform.
- Settlement is in conjunction with the GCF Repo settlement process and timelines.

#### **CCIT Service: Trade Flow**

Day 1: Settlement



Based on details of matched trades, FICC transmits Start leg settlement obligations to designated Clearing Bank.

#### Settlement Occurs:

- Step 1: GSD Dealer Member Borrower pledges collateral to FICC.
- Step 2: Clearing Bank validates collateral and value.
- Step 3: FICC onward pledges collateral to Cash Lender.
- <u>Step 4</u>: Clearing Bank debits Cash Lender and credits cash to GSD Dealer Member Borrower via FICC's account.

#### **CCIT Service: Trade Flow**

#### **During Life of Trade**

Dealers can substitute pledged collateral during the day.

#### **End of Trade**



Assuming no other new trade was added, off leg of tri-party trade unwinds as follows:

- 1. <u>Step 1</u>: Clearing Bank moves pledged collateral out of Cash Lender's account to FICC's account in exchange for cash original value (interest paid via Funds Only Settlement).
- 2. <u>Step 2</u>: Clearing Bank moves pledged collateral out of FICC's account into GSD Dealer Netting Member Borrower's account in exchange for cash original value (interest paid via Funds Only Settlement).

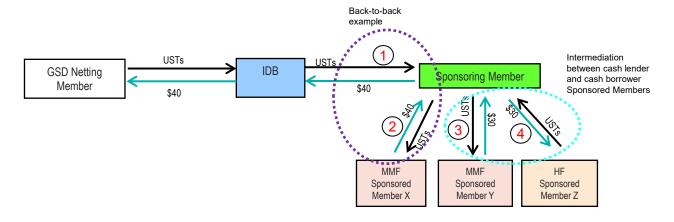


## **Sponsored Membership**

- Sponsored membership at GSD offers eligible clients the ability to lend cash or eligible collateral via FICC-cleared repo throughout the day.
- Sponsoring Members facilitate their sponsored clients' GSD trading activity and act as processing agents on their behalf for all
  operational functions, including trade submission and settlement with the CCP.
- Any firm that is established in a permitted jurisdiction, satisfies the QIB standard and has at least one Sponsoring Member is eligible to be a Sponsored Member.
- Sponsored DVP Transactions may be executed as between a Sponsored Member and its Sponsoring Member ("Done With"), or between a Sponsored Member and a third-party GSD Netting Member ("Done-Away").
- Sponsored GC Service allows Sponsoring Members to transact financing transactions with their Sponsored Members on a general collateral (GC) basis and settle those transactions on a tri-party repo system. Transactions settle on a trade for trade basis and novate once the start leg has settled.

#### **Sponsored Model – Sample TSY DVP Repo Trade ("Done With")**

Trade Execution – Sponsoring Member executes repo trades with its Sponsored Members



<u>Trade 1</u>: Sponsoring Member executes a \$40 Reverse Repo with an IDB (<u>note</u>: this Reverse Repo could have also been executed by the Sponsoring Member directly with another GSD Netting Member).

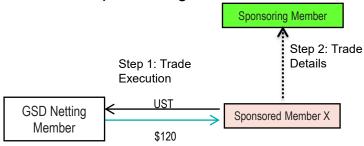
<u>Trades 2 and 3:</u> Sponsoring Member executes two Repos versus MMF Sponsored Member X (\$40) and MMF Sponsored Member Y (\$30), respectively. MMFs are lending cash to the Sponsoring Member.

<u>Trade 4:</u> Sponsoring Member executes a \$30 Reverse Repo versus HF Sponsored Member Z, where a Sponsoring Member is reversing in securities from a HF.



## Sponsored Model - Sample TSY DVP Repo Trade ("Done Away")

Sponsored Member executes a trade with a GSD Netting Member other than its Sponsoring Member.

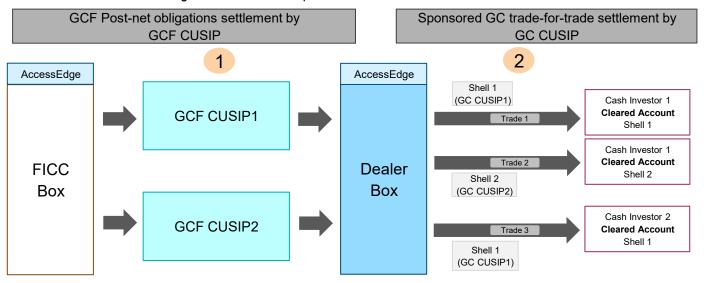


<u>Step 1 – Trade execution</u>: Sponsored Member X executes a trade with a GSD Netting Member other than its Sponsoring Member.

<u>Step 2 – Notification of trade details</u>: Sponsored Member X notifies its Sponsoring Member of the executed trade details.

## **Sponsored Model – Sample Sponsored GC Repo Trade**

Start Leg Settlement – Example shows when the source of securities is GCF

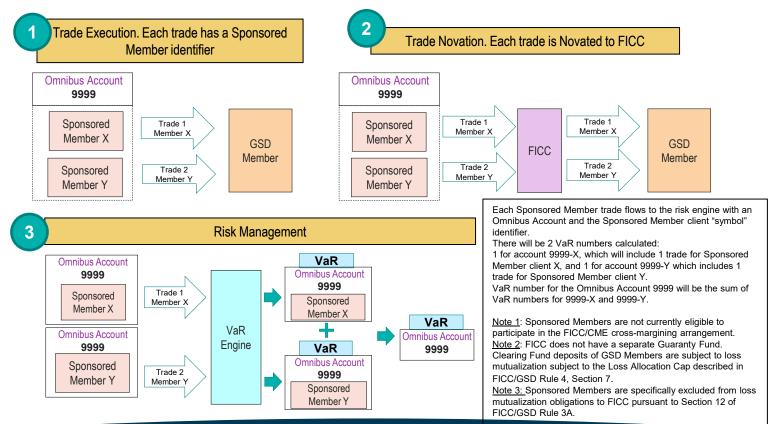


- (1) The left side of the picture shows post-net settlement of GCF obligations. Securities are allocated from FICC's GCF account on the Tri-party system to Sponsoring Member's Dealer box on AccessEdge.
- (2) The right side of the picture shows trade-for-trade settlement of Sponsored GC Trades. Sponsored GC Trades settle <u>directly</u> between a Sponsoring Member and its Sponsored Members.

Important: Novation of a Sponsored GC Trade takes place only if a start leg of that trade settles by 5:30pm ET on the Tri-party system.



## **Sponsored Member Risk Management**

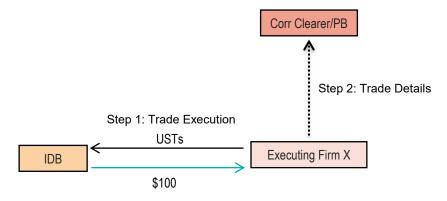


# **Correspondent Clearing and Prime Brokerage Clearing**

- GSD Netting Members that are correspondent clearing firms or prime brokers (referred to as the "Submitting Member" in the GSD Rulebook) are permitted to submit to FICC transactions on behalf of their clients that are not GSD members (referred to as "Executing Firms" in the GSD Rulebook).
- Executing Firms are represented by ticker symbols mapped to the relevant Submitting Member.
- The Submitting Member can submit eligible transactions executed by an Executing Firm with another GSD Member to either (1) its own GSD Member account or (2) a separate GSD Member account that it may establish for such activity.
- Eligible transactions include outright purchases and sales of U.S. Treasury and Agency securities, as well as two-directional (i.e., cash borrowing and cash lending) overnight and term DVP repo.

# Corr Clearing / PB Clearing Model - Sample Cash TSY Trade

Executing Firm executes trade with a GSD Member IDB



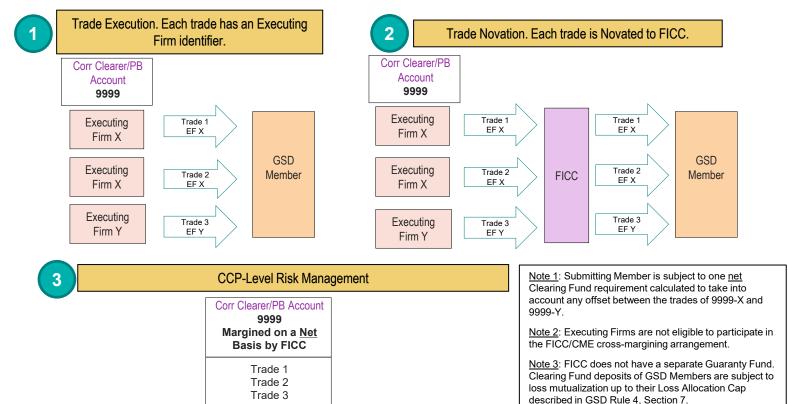
<u>Step 1 – Trade execution</u>: Executing Firm executes a trade with an Inter-Dealer Broker (IDB) that is a GSD Member.

<u>Step 2 – Notification of trade details</u>: Executing Firm X notifies the Submitting Member of the executed trade details (vs. the IDB) so the Submitting Member can submit this trade to FICC for match.

Note 1: For Treasury cash activity, IDB may, but is not required by the GSD Rulebook to, have any of the following as counterparty to this trade: (i) another Netting Member, (ii) an Executing Firm cleared by the same or different Submitting Member, or (iii) a Sponsored Member.

Note 2: For Treasury, Agency or Agency MBS repo activity, the IDB is required by the GSD Rulebook to have another Netting Member, or an Executing Firm on whose behalf a Netting Member is acting as an agent clearer, on both sides of the trade.

# Corr Clearing / PB Clearing - Risk Management by FICC



# **Risk Management**

#### Clearing Fund

- Clearing Fund is collected from Members to address the potential losses to FICC associated with liquidating a Member's portfolio in the event FICC ceases-to-act for that Member.
- On a daily basis, FICC calculates and collects Clearing Fund, using a risk-based margin methodology, which consists of multiple components intended to capture Member's portfolio risk.
- For GSD, SOD Clearing Fund deficits must be paid by 9:30 AM ET, Noon Clearing Fund deficits must be paid by 2:45 PM ET.
- GSD may call for additional Clearing Fund on an intraday basis to mitigate the market risk exposure in excess of certain thresholds, which requires funding within one hour of demand.

#### Mark to Market

 Mark to market is performed and collected/paid twice a day on both the security and repo rates as part of the Funds-Only Settlement service.





## PROPOSED TREASURY CENTRAL CLEARING

Laura Klimpel - General Manager of FICC and Head of SIFMU Business Development, DTCC

# **USTClearing.com**









# **SUBMIT YOUR QUESTIONS**



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### PANEL DISCUSSION

Laura Klimpel - General Manager of FICC and Head of SIFMU Business Development, DTCC
Brian Disken - Executive Director, Fixed Income Product Management, DTCC
John Vinci - Executive Director, Relationship Management DTCC
Andrea Pfenning - Global COO for Clearance & Collateral Management, BNY Mellon
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